

**TRANSMITTAL LETTER TO THE UNITED STATES  
DESIGNATED/ELECTED OFFICE (DO/EO/US)  
CONCERNING A FILING UNDER 35 U.S.C. 371**

IAPI0Rcd/PCT/PTO 09 DEC 2005

09792909-6096

U.S. APPLICATION NO. (if known, see 37 CFR 1.5)  
10/536,513

INTERNATIONAL APPLICATION NO.  
PCT/JP03/15286

INTERNATIONAL FILING DATE  
November 28, 2004

PRIORITY DATE CLAIMED  
December 13, 2002

TITLE OF INVENTION **"IMAGE DISPLAY APPARATUS"**

APPLICANT(S) FOR DO/EO/US Hiroaki Matsui, Tomoya Yano and Yukio Ohmura

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☐ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
  2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
  3. ☐ This express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay.
  4. ☐ A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date and the U.S. has been elected.
  5. ☐ A copy of International Application (35 U.S.C. 371(c)(2))
    - a. ☐ is transmitted herewith (required only if not transmitted by the International Bureau).
    - b. ☐ has been transmitted by the International Bureau.
    - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US)
  6. ☐ A translation of the International Application into English (35 U.S.C. 371(c)(2)).
  7. ☐ Amendments to the claims of the International Application under PCT Article 34.
    - a. ☐ are transmitted herewith (required only if not transmitted by the International Bureau).
    - b. ☐ have been transmitted by the International Bureau.
    - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
    - d. ☐ have not been made and will not be made.
  8. ☐ A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)) (attached at back of English translation of application)
  9. ☐ An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
  10. ☒ A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)) - Forms 338 and 409.
- Items 11. to 16. below concern other document(s) or information included:
11. ☐ An Information Disclosure Statement under 37 C.F.R. 1.97 and 1.98; (PTO 1449, Prior Art, Search Report).
  12. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 C.F.R. 3.28 and 3.31 is included.
  13. ☐ A **FIRST** preliminary amendment.
  14. ☐ A **SECOND** or **SUBSEQUENT** preliminary amendment.
  15. ☐ A substitute specification.
  16. ☐ A change of power of attorney and/or address letter.
  17. ☐ Other items or information:
    - a. ☐ Submission of Drawings
    - b. ☐ EXPRESS MAIL
    - c. ☐
    - f. ☐ Form 2038

U.S. APPLICATION NO. (if known, see 37 C.F.R. 1.5)  
10/536,513

INTERNATIONAL APPLICATION NO.  
PCT/JP03/15286

ATTORNEY'S DOCKET NUMBER  
09-6096

17. ☒ The following fees are submitted:

**BASIC NATIONAL FEE (37 C.F.R. 1.492(a)(1)-(5):**

Neither international preliminary examination fee (37 CFR §1.482)  
Nor international search fee (37 CFR §1.445(a)(2)) paid to USPTO  
And International Search Report not prepared by the EPO or JPO \$1080.00

International preliminary examination fee (37 C.F.R. §1.482) not paid to  
USPTO but International Search Report prepared by the EPO or JPO \$ 920.00

International Preliminary examination fee (37 CFR §1.482) not paid to USPTO  
But international search fee (37 CFR §1.445(a)(2)) paid to USPTO \$ 770.00

International preliminary examination fee (37 C.F.R. §1.482) paid to USPTO  
But all claims did not satisfy provisions of PCT Article 33(1)-(4) \$ 730.00

International preliminary examination fee (37 CFR §1.482) paid to USPTO  
and all claims satisfied provisions of PCT Article 33(1)-(4) \$ 100.00

**ENTER APPROPRIATE BASIC FEE AMOUNT**

=

Surcharge of \$130.00 for furnishing the oath or declaration later than ☐ 20 ☐ 30 months from  
the earliest claimed priority date (37 C.F.R. 1.492(e)).

Claims	Number Filed	Number Extra	Rate		
Total Claims		1	X \$ 18.00	\$	
Independent Claims			X \$ 86.00	\$	
Multiple Dependent Claims			\$280.00 +	\$	

**TOTAL OF ABOVE CALCULATIONS =**

☐ Applicant claims small entity status. See 37 CFR §1.27. The fees indicated above are reduced  
by ½.

**SUBTOTAL**

=

Processing fee of \$130.00 for furnishing the English translation later than ☐ 20 ☐ 30 months  
from the earliest claimed priority date (37 CFR 1.492(f)).

**TOTAL NATIONAL FEE**

=

Fee for recording the enclosed assignment (37 C.F.R. 1.21(h)). The assignment must be  
accompanied by an appropriate cover sheet (37 C.F.R. 3.28, 3.31). \$40.00 per property +

**TOTAL FEES ENCLOSED**

=

Amount to be refunded	\$
charged	\$

- a. ☐ A check in the amount of \$\_\_\_ to cover the above fees is enclosed.  
b. ☐ Please charge attorney's firm American Express Account in the amount of \$\_\_\_ to cover the above fees. PTO Form 2038 is enclosed for that purpose.  
c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 19-3140. A duplicate copy of this sheet is enclosed.  
**NOTE:** Where an appropriate time limit under 37 C.F.R. 1.494 or 1.495 has not been met, a petition to revive (37 C.F.R. 1.137(a) or (b)) must be filed and granted to restore the application to pending status.

**SEND ALL CORRESPONDENCE TO:**

Sonnenschein, Nath & Rosenthal LLP  
P.O. Box 061080  
Wacker Drive Station - Sears Tower  
Chicago, Illinois 60606-1080  
Customer No. 26263  
Telephone 312/876-8000

  
SIGNATURE

David R. Metzger

NAME  
32,919

Registration Number  
December 7, 2005

Date:

Dec 09 DEC 2005

**PCT**

NOTIFICATION OF TRANSMITTAL  
OF COPIES OF TRANSLATION  
OF THE INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY  
(CHAPTER I OR CHAPTER II  
OF THE PATENT COOPERATION TREATY)  
(PCT Rule 72.2)

To:

KOIKE, Akira  
11th Floor, Yamato Seimei Bldg.  
1-7, Uchisaiwai-cho 1-chome  
Chiyoda-ku  
Tokyo 100-0011  
JAPON

Date of mailing ( <i>day/month/year</i> ) 25 August 2005 (25.08.2005)	<b>IMPORTANT NOTIFICATION</b>
Applicant's or agent's file reference SK03PCT127	
International application No. PCT/JP2003/015286	International filing date ( <i>day/month/year</i> ) 28 November 2003 (28.11.2003)
Applicant SONY CORPORATION et al	

**1. Transmittal of the translation to the applicant.**

The International Bureau transmits herewith a copy of the English translation made by the International Bureau of the international preliminary examination report established by the International Preliminary Examining Authority.

**2. Transmittal of the copy of the translation to the elected Offices.**

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following elected Offices requiring such translation:

CN, KR

The following elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the International Bureau only upon their request:

US

**3. Reminder regarding translation into (one of) the official language(s) of the elected Office(s).**

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report.

It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned (Rule 74.1). See Volume II of the PCT Applicant's Guide for further details.

The International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland

Authorized officer

Masashi Honda

Facsimile No.+41 22 740 14 35

Facsimile No.+41 22 338 70 10

Translation

Rec'd PCT/PTO

09 DEC 2005

PCT/JP2003/015286

PATENT COOPERATION TREATY



# PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference SK03PCT127	FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/JP2003/015286	International filing date (day/month/year) 28 November 2003 (28.11.2003)	Priority date (day/month/year) 13 December 2002 (13.12.2002)
International Patent Classification (IPC) or national classification and IPC G03B 21/00		
Applicant SONY CORPORATION		

<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>4</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> (sent to the applicant and to the International Bureau) a total of _____ sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>	
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the report</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>	

Date of submission of the demand 01 March 2004 (01.03.2004)	Date of completion of this report 26 May 2004 (26.05.2004)
Name and mailing address of the IPEA/JP	Authorized officer
Facsimile No.	Telephone No.

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2003/015286

## Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☐ This report is based on translations from the original language into the following language \_\_\_\_\_, which is language of a translation furnished for the purpose of:
- ☐ international search (under Rules 12.3 and 23.1(b))
- ☐ publication of the international application (under Rule 12.4)
- ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

- ☒ The international application as originally filed/furnished
- ☐ the description:
- pages \_\_\_\_\_, as originally filed/furnished
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ the claims:
- pages \_\_\_\_\_, as originally filed/furnished
- pages\* \_\_\_\_\_, as amended (together with any statement) under Article 19
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ the drawings:
- pages \_\_\_\_\_, as originally filed/furnished
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International Application No.

PCT/JP 03/15286

## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

### 1. Statement

Novelty (N)	Claims	1-12	YES
	Claims		NO
Inventive step (IS)	Claims	1-12	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-12	YES
	Claims		NO

### 2. Citations and explanations

Documents cited in the international search report:

Document 1: JP 2002-328430 A (Sony Corp.), 15 November 2002

Document 2: JP 2002-131837 A (Sony Corp.), 9 May 2002

#### Claims 1 to 12

The "spheroidal mirror (16)," "1/4 wavelength plate (18)," and "reflector plate (14)" of the invention disclosed in document 1 (paragraphs [0136] to [0145], fig. 35) correspond to the "spheroidal reflecting mirror (1)," "polarizing element (3)," and "reflector plate (4)" of the present invention.

However, in the invention disclosed in document 1, a "reflecting circular polarizer plate (19)" and a "1/4 wavelength plate (51)" are positioned to the rear of a field lens (21), whereas in the present invention, a "reflecting polarized light selector element (5)" is positioned in proximity to the second focal point of the spheroidal reflecting mirror; this feature is not disclosed in any of the documents, nor would this feature be obvious to a person skilled in the art.

The "1/2 wavelength plate (418)," "reflector plate (414)," and "reflecting polarizer plate (140)" of the

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International Application No.

PCT/JP 03/15286

invention disclosed in document 2 (paragraphs [0350] to [0356], fig. 49-50) correspond to the "polarizing element (3)," "reflector plate (4)," and "reflecting polarized light selector element (5)" of the present invention.

However, the feature of the present invention wherein the "reflector plate (4)" and "reflecting polarized light selector element (5)" are disposed at a position in the circle of least confusion formed by the convergence of light in proximity to the second focal point of the spheroidal reflecting mirror is not disclosed in any of the documents, nor would this feature be obvious to a person skilled in the art.